****
Reviewer Comments:
<210> 6
<211> 1310
<212> PRT
<213> Varicella zoster

<220>
<221> misc_feature
<222> (99)..(99)
<223> The 'Xaa' at location 99 stands for Thr, or Met.

<220>
<221> misc_feature
<222> (512)..(512)
<223> The 'Xaa' at location 512 stands for Ala, or Val.

<220>
<221> misc_feature
<222> (1275)..(1275)
<223> The 'Xaa' at location 1275 stands for Ser, Leu, or Xaa.

The above <223> response describing "Xaa" at location 1275 contains an
error: "Xaa" can only represent an actual amino acid; "Xaa" cannot
represent an Xaa.
****

```
        Validated By CRFValidator v 1.0.3
```

Application No: 10591787   Version No: 1.0

                  Input Set:

                 Output Set:

                  Started: 2009-05-19 13:25:27.500
                 Finished: 2009-05-19 13:25:45.311
                  Elapsed: 0 hr(s) 0 min(s) 17 sec(s) 811 ms
           Total Warnings: 5
             Total Errors: 0
    No. of SeqIDs Defined: 91
       Actual SeqID Count: 91

Error code   Error Description

W   213   Artificial or Unknown found in <213> in SEQ ID (1)

W   213   Artificial or Unknown found in <213> in SEQ ID (2)

W   213   Artificial or Unknown found in <213> in SEQ ID (3)

W   213   Artificial or Unknown found in <213> in SEQ ID (4)

W   213   Artificial or Unknown found in <213> in SEQ ID (7)

<110> Nagaike, Kazuhiro
        Mori, Yasuko
        Gomi, Yasuyuki
        Takahashi, Michiaki
        Kouichi, Yamanishi

<120> Recombinant varicella-zoster virus

<130> 59150-8037

<140> 10591787
<141> 2009-05-19

<150> PCT/JP2005/003652
<151> 2005-03-05

<150> JP 2004-063277
<151> 2004-03-05

<160> 91

<170> PatentIn version 3.2

<210> 1
<211> 35
<212> DNA
<213> Artificial

<220>
<223> primer

<400> 1
tataactagt gcggccgctt acgaaaacgt gcatg   35

<210> 2
<211> 34
<212> DNA
<213> Artificial

<220>
<223> primer

<400> 2
cgcgacctgg tttattttac aaactccttt gtgg   34

<210> 3
<211> 34
<212> DNA
<213> Artificial

<220>
<223> primer

<400> 3
gcgcaccagg tctctgttta gaccttaaaa tttg   34

<210> 4
<211> 34
<212> DNA
<213> Artificial

<220>
<223> primer

<400> 4
tatagcggcc gctttttaatc tggttgtgga aatg   34

<210> 5
<211> 4226
<212> DNA
<213> Varicella zoster

<220>
<221> CDS
<222> (229)..(4158)
<223> Varicella zoster

<400> 5
atactatggt ccatgaactt cccgcctcga gtctcgtcca atcactacat cgtcttatca   60

ttaagaatat ttacacggtg acgacacggg gaggaaatat gcggtcgagg gggggcaca   120

acacgtttta agtactgttg gaactccctc accaaccgca aycgcaatcc tttgaaggct   180

gcgagagcgt ttggaaaact cgggtacgtc taaattcacc ccagygcg atg gat acg   237
                                                       Met Asp Thr
                                                         1

ccg ccg atg cag cgc tct aca ccc caa cgc gcg ggg tcg cct gat act   285
Pro Pro Met Gln Arg Ser Thr Pro Gln Arg Ala Gly Ser Pro Asp Thr
   5   10   15

ttg gag tta atg gac ctg ttg gac gcg gcc gcc gcg gcc gcc gaa cac   333
Leu Glu Leu Met Asp Leu Leu Asp Ala Ala Ala Ala Ala Ala Glu His
20   25   30   35

agg gcc cgg gtg gtc acc tcg agt cag cct gac gat cta cta ttt gga   381
Arg Ala Arg Val Val Thr Ser Ser Gln Pro Asp Asp Leu Leu Phe Gly
            40   45   50

gag aac ggg gtc atg gtg gga cgg gaa cat gag atc gtt tca att ccc   429
Glu Asn Gly Val Met Val Gly Arg Glu His Glu Ile Val Ser Ile Pro
            55   60   65

tcc gta tcg gga ctt caa cca gaa ccc aga acg gaa gat gtt ggc gaa   477
Ser Val Ser Gly Leu Gln Pro Glu Pro Arg Thr Glu Asp Val Gly Glu
         70   75   80

```
gag cta aca caa gac gac tac gta tgc gag gac ggt cag gat cta ayg        525
Glu Leu Thr Gln Asp Asp Tyr Val Cys Glu Asp Gly Gln Asp Leu Xaa
    85              90              95

ggc tcg cct gta atc ccg ctg gcc gag gtc ttc cac acc cga ttc tcg        573
Gly Ser Pro Val Ile Pro Leu Ala Glu Val Phe His Thr Arg Phe Ser
100             105             110             115

gag gcc ggc gcg cga gaa cca aca gga gcc gat cgc tcc ctc gag aca        621
Glu Ala Gly Ala Arg Glu Pro Thr Gly Ala Asp Arg Ser Leu Glu Thr
            120             125             130

gtc tct ctc gga acg aag ctt gct agg tct cca aaa cca ccg atg aac        669
Val Ser Leu Gly Thr Lys Leu Ala Arg Ser Pro Lys Pro Pro Met Asn
            135             140             145

gat ggg gaa acg ggc aga ggt acg acc cct ccg ttc ccg cag gcc ttc        717
Asp Gly Glu Thr Gly Arg Gly Thr Thr Pro Pro Phe Pro Gln Ala Phe
            150             155             160

tcc cct gta tcc ccc gcg tct cct gtt gga gac gcc gcc ggg aac gat        765
Ser Pro Val Ser Pro Ala Ser Pro Val Gly Asp Ala Ala Gly Asn Asp
    165             170             175

caa cgg gaa gac cag cgg tct ata ccc cga caa acg acg aga gga aat        813
Gln Arg Glu Asp Gln Arg Ser Ile Pro Arg Gln Thr Thr Arg Gly Asn
180             185             190             195

tca cca ggt ttg ccg tcg gtg gtc cat cga gac aga caa act cag tcc        861
Ser Pro Gly Leu Pro Ser Val Val His Arg Asp Arg Gln Thr Gln Ser
            200             205             210

atc tcg ggt aaa aag ccg ggc gat gag caa gcg ggt cat gcg cat gca        909
Ile Ser Gly Lys Lys Pro Gly Asp Glu Gln Ala Gly His Ala His Ala
            215             220             225

tcg ggg gac gga gta gtt ctc cag aaa act caa cgg ccc gct cag gga        957
Ser Gly Asp Gly Val Val Leu Gln Lys Thr Gln Arg Pro Ala Gln Gly
            230             235             240

aag agc ccg aag aaa aag act ttg aag gtt aag gtc cca ctc ccg gcg        1005
Lys Ser Pro Lys Lys Lys Thr Leu Lys Val Lys Val Pro Leu Pro Ala
    245             250             255

cgg aaa ccc ggt gga cct gta ccc ggc ccg gtt gag caa ttg tac cac        1053
Arg Lys Pro Gly Gly Pro Val Pro Gly Pro Val Glu Gln Leu Tyr His
260             265             270             275

gtc ctt tcg gac agc gtt ccc gct aag ggg gca aag gcg gac ctg ccg        1101
Val Leu Ser Asp Ser Val Pro Ala Lys Gly Ala Lys Ala Asp Leu Pro
            280             285             290

ttt gag acc gat gat acc cgc cca agg aaa cat gat gcc cgg ggt ata        1149
Phe Glu Thr Asp Asp Thr Arg Pro Arg Lys His Asp Ala Arg Gly Ile
            295             300             305
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aca cct cgc gtc cct gga cgt tcg tcg ggg ggc aaa cct aga gcg ttt          1197
Thr Pro Arg Val Pro Gly Arg Ser Ser Gly Gly Lys Pro Arg Ala Phe
        310             315             320


ttg gcc ctg ccg gga aga tcc cac gca cca gac ccg att gag gat gac          1245
Leu Ala Leu Pro Gly Arg Ser His Ala Pro Asp Pro Ile Glu Asp Asp
    325             330             335


agc ccg gtg gag aaa aag cca aag agt cgt gag ttt gtt tcg tct tca          1293
Ser Pro Val Glu Lys Lys Pro Lys Ser Arg Glu Phe Val Ser Ser Ser
340             345             350             355


tcc tct tcc tcg tcg tgg gga tcg tca tcg gag gat gaa gac gat gaa          1341
Ser Ser Ser Ser Ser Trp Gly Ser Ser Ser Glu Asp Glu Asp Asp Glu
            360             365             370


ccc cgg cgc gtt tcg gtg gga agt gaa act aca ggc agc agg tcc gga          1389
Pro Arg Arg Val Ser Val Gly Ser Glu Thr Thr Gly Ser Arg Ser Gly
            375             380             385


cgc gaa cac gcc cct tcc ccg tca aat tcg gat gat tcg gac tca aat          1437
Arg Glu His Ala Pro Ser Pro Ser Asn Ser Asp Asp Ser Asp Ser Asn
        390             395             400


gat ggt ggg tcg acg aaa caa aat atc caa ccg gga tat cga tcc atc          1485
Asp Gly Gly Ser Thr Lys Gln Asn Ile Gln Pro Gly Tyr Arg Ser Ile
    405             410             415


agc ggt ccc gat ccg agg att cgt aag acc aaa cgt ctt gcg ggg gaa          1533
Ser Gly Pro Asp Pro Arg Ile Arg Lys Thr Lys Arg Leu Ala Gly Glu
420             425             430             435


ccg ggg cgc cag aga cag aaa tca ttt tcc ctg ccg cga tcc aga acc          1581
Pro Gly Arg Gln Arg Gln Lys Ser Phe Ser Leu Pro Arg Ser Arg Thr
            440             445             450


ccg ata att ccc ccg gtg tcg ggg ccg ctc atg atg ccc gac gga agc          1629
Pro Ile Ile Pro Pro Val Ser Gly Pro Leu Met Met Pro Asp Gly Ser
            455             460             465


cct tgg ccc gga tcg gcg ccc ctc cca tcc aac agg gtg cgg ttt gga          1677
Pro Trp Pro Gly Ser Ala Pro Leu Pro Ser Asn Arg Val Arg Phe Gly
        470             475             480


ccg tcc ggg gag acc aga gag ggt cac tgg gag gat gag gct gtg aga          1725
Pro Ser Gly Glu Thr Arg Glu Gly His Trp Glu Asp Glu Ala Val Arg
    485             490             495


gcg gcg cgg gct cgt tac gag gcc tca act gaa ccc gyg ccg ctt tac          1773
Ala Ala Arg Ala Arg Tyr Glu Ala Ser Thr Glu Pro Xaa Pro Leu Tyr
500             505             510             515


gtg ccg gag ttg gga gat ccg gct aga cag tac cgc gcg ctg att aac          1821
Val Pro Glu Leu Gly Asp Pro Ala Arg Gln Tyr Arg Ala Leu Ile Asn
            520             525             530


ctg atc tac tgt cca gac aga gac cct ata gca tgg ctc cag aac ccc          1869
```

```
Leu Ile Tyr Cys Pro Asp Arg Asp Pro Ile Ala Trp Leu Gln Asn Pro
        535             540             545


aag ctg acc ggt gtc aac tcg gcc ctg aac cag ttc tac caa aag ctg      1917
Lys Leu Thr Gly Val Asn Ser Ala Leu Asn Gln Phe Tyr Gln Lys Leu
        550             555             560


ttg cca ccg gga cgg gcg ggt acc gcc gtt acg ggg agc gta gcg tct      1965
Leu Pro Pro Gly Arg Ala Gly Thr Ala Val Thr Gly Ser Val Ala Ser
        565             570             575


ccc gtt ccg cat gta ggc gaa gcc atg gcc acg ggg gag gcc ctc tgg      2013
Pro Val Pro His Val Gly Glu Ala Met Ala Thr Gly Glu Ala Leu Trp
580             585             590             595


gct ctc ccc cac gcg gcc gcg gcc gtg gct atg agc cgt cgg tac gac      2061
Ala Leu Pro His Ala Ala Ala Ala Val Ala Met Ser Arg Arg Tyr Asp
                600             605             610


cgg gcc caa aaa cac ttt atc cta cag agt ctc cgc aga gcc ttt gcc      2109
Arg Ala Gln Lys His Phe Ile Leu Gln Ser Leu Arg Arg Ala Phe Ala
                615             620             625


ggc atg gca tac ccc gag gca acg ggc tcc agt ccg gcg gcg cgg atc      2157
Gly Met Ala Tyr Pro Glu Ala Thr Gly Ser Ser Pro Ala Ala Arg Ile
                630             635             640


tcc cgc ggt cac cct tct cca aca acc ccg gcc aca cag act ccc gac      2205
Ser Arg Gly His Pro Ser Pro Thr Thr Pro Ala Thr Gln Thr Pro Asp
        645             650             655


cct cag ccg tcg gcc gcc gcg cgc tct ctt tct gtg tgt cca ccg gat      2253
Pro Gln Pro Ser Ala Ala Ala Arg Ser Leu Ser Val Cys Pro Pro Asp
660             665             670             675


gat cgt tta cga act ccg cgc aag cgc aag tcc cag cca gtc gag agc      2301
Asp Arg Leu Arg Thr Pro Arg Lys Arg Lys Ser Gln Pro Val Glu Ser
                680             685             690


aga agc ctc ctc gac aag att agg gag aca ccc gtc gcg gac gcc cgg      2349
Arg Ser Leu Leu Asp Lys Ile Arg Glu Thr Pro Val Ala Asp Ala Arg
                695             700             705


gtt gca gac gat cat gtg gtt tcc aag gcc aag agg cgg gta tcc gag      2397
Val Ala Asp Asp His Val Val Ser Lys Ala Lys Arg Arg Val Ser Glu
        710             715             720


ccc gtg acc atc acc tcg ggc cct gtg gtg gat ccc ccc gcc gta ata      2445
Pro Val Thr Ile Thr Ser Gly Pro Val Val Asp Pro Pro Ala Val Ile
        725             730             735


acg atg cca ctt gac gga ccg gcc cca aac ggg gga ttt cgg cgt att      2493
Thr Met Pro Leu Asp Gly Pro Ala Pro Asn Gly Gly Phe Arg Arg Ile
740             745             750             755


ccc cgg ggg gcc ctg cat acc ccg gtc ccg tcg gac cag gct cgc aag      2541
Pro Arg Gly Ala Leu His Thr Pro Val Pro Ser Asp Gln Ala Arg Lys
```

gcg tac tgt acc ccc gaa acc atc gcc cgt ctg gtc gac gac cca ttg   2589
Ala Tyr Cys Thr Pro Glu Thr Ile Ala Arg Leu Val Asp Asp Pro Leu
        775   780   785

ttt ccc acg gcc tgg cgc cct gcg cta agc ttt gat ccc ggc gcc ttg   2637
Phe Pro Thr Ala Trp Arg Pro Ala Leu Ser Phe Asp Pro Gly Ala Leu
        790   795   800

gcg gaa atc gcc gct cgg cgt ccg ggc gga gga gac cga cgg ttt ggt   2685
Ala Glu Ile Ala Ala Arg Arg Pro Gly Gly Gly Asp Arg Arg Phe Gly
        805   810   815

cca ccc agc gga gtg gag gcg ctg cga cgg agg tgc gcc tgg atg cgg   2733
Pro Pro Ser Gly Val Glu Ala Leu Arg Arg Arg Cys Ala Trp Met Arg
820   825   830   835

cag atc cca gac ccg gag gat gtg agg ctt ctg atc atc tac gat ccg   2781
Gln Ile Pro Asp Pro Glu Asp Val Arg Leu Leu Ile Ile Tyr Asp Pro
                840   845   850

ttg ccc gga gag gac atc aac ggc ccc ctc gag agc acc ctc gcg aca   2829
Leu Pro Gly Glu Asp Ile Asn Gly Pro Leu Glu Ser Thr Leu Ala Thr
                855   860   865

gat ccg gga ccg tca tgg agt cca tcc cga ggg gga ctg tct gtg gtc   2877
Asp Pro Gly Pro Ser Trp Ser Pro Ser Arg Gly Gly Leu Ser Val Val
                870   875   880

ctg gca gcc ctg agt aac cgg ttg tgc ctg ccg agc act cat gcc tgg   2925
Leu Ala Ala Leu Ser Asn Arg Leu Cys Leu Pro Ser Thr His Ala Trp
        885   890   895

gcc ggg aac tgg acc ggc ccg ccg gac gtg tcc gct ttg aac gcc cgg   2973
Ala Gly Asn Trp Thr Gly Pro Pro Asp Val Ser Ala Leu Asn Ala Arg
900   905   910   915

ggc gtt tta tta ctg tcg acc cga gac ctg gcc ttt gcc ggg gcc gtc   3021
Gly Val Leu Leu Leu Ser Thr Arg Asp Leu Ala Phe Ala Gly Ala Val
                920   925   930

gag tat cta ggc tcg cgg ttg gcc tct gcc cgg cgc cgg ttg ctg gtg   3069
Glu Tyr Leu Gly Ser Arg Leu Ala Ser Ala Arg Arg Arg Leu Leu Val
                935   940   945

ttg gac gcg gtg gcc ctc gag agg tgg ccc ggg gat gga ccc gct ttg   3117
Leu Asp Ala Val Ala Leu Glu Arg Trp Pro Gly Asp Gly Pro Ala Leu
        950   955   960

tct cag tat cac gtg tac gtc cgg gcc ccg gcg cga ccg gac gcc cag   3165
Ser Gln Tyr His Val Tyr Val Arg Ala Pro Ala Arg Pro Asp Ala Gln
        965   970   975

gcc gtc gtc cga tgg cca gac tcg gcg gtc aca gaa gga ctc gcc cgg   3213
Ala Val Val Arg Trp Pro Asp Ser Ala Val Thr Glu Gly Leu Ala Arg
980   985   990   995

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gcc gtg ttt gca tcg   tcg cgc acc ttt ggg   cca gcg agt ttt gct        3258
Ala Val Phe Ala Ser   Ser Arg Thr Phe Gly   Pro Ala Ser Phe Ala
                1000               1005                   1010


cgt atc gag act gcg   ttt gcc aac ctg tac   ccg ggc gaa caa ccc        3303
Arg Ile Glu Thr Ala   Phe Ala Asn Leu Tyr   Pro Gly Glu Gln Pro
                1015               1020                   1025


ctg tgt ttg tgc cgc   ggt ggg aac gtc gca   tac acc gtg tgt acc        3348
Leu Cys Leu Cys Arg   Gly Gly Asn Val Ala   Tyr Thr Val Cys Thr
                1030               1035                   1040


cgc gcg ggc ccc aag   acc cgc gtc ccc ctg   tcg ccc cgt gaa tac        3393
Arg Ala Gly Pro Lys   Thr Arg Val Pro Leu   Ser Pro Arg Glu Tyr
                1045               1050                   1055


cgg cag tac gtg ctg   ccg ggt ttt gac ggt   tgc aag gac ctc gcg        3438
Arg Gln Tyr Val Leu   Pro Gly Phe Asp Gly   Cys Lys Asp Leu Ala
                1060               1065                   1070


cga cag tct cgg ggt   ctg ggg ctc ggg gca   gcc gac ttt gtg gac        3483
Arg Gln Ser Arg Gly   Leu Gly Leu Gly Ala   Ala Asp Phe Val Asp
                1075               1080                   1085


gag gcg gca cat agc   cac cgc gca gca aac   cga tgg ggc ctg ggt        3528
Glu Ala Ala His Ser   His Arg Ala Ala Asn   Arg Trp Gly Leu Gly
                1090               1095                   1100


gcc gcg ctt cga ccc   gtc ttc ctt ccc gag   gga cgg aga ccg ggg        3573
Ala Ala Leu Arg Pro   Val Phe Leu Pro Glu   Gly Arg Arg Pro Gly
                1105               1110                   1115


gcc gcc ggg ccg gag   gcc ggc gac gta ccc   acc tgg gcg agg gtg        3618
Ala Ala Gly Pro Glu   Ala Gly Asp Val Pro   Thr Trp Ala Arg Val
                1120               1125                   1130


ttt tgc cgc cac gcc   ctg ctg gaa ccc gac   cct gcc gcg gaa cca        3663
Phe Cys Arg His Ala   Leu Leu Glu Pro Asp   Pro Ala Ala Glu Pro
                1135               1140                   1145


ctc gtg ctt cca ccc   gtg gcc ggt cgg tcg   gtg gcg ctg tat gcg        3708
Leu Val Leu Pro Pro   Val Ala Gly Arg Ser   Val Ala Leu Tyr Ala
                1150               1155                   1160


tcg gcg gac gag gct   cgg aat gcc ctc ccc   ccg att ccc aga gta        3753
Ser Ala Asp Glu Ala   Arg Asn Ala Leu Pro   Pro Ile Pro Arg Val
                1165               1170                   1175


atg tgg ccg ccc ggt   ttt ggg gcc gcg gag   acg gtg ttg gag ggg        3798
Met Trp Pro Pro Gly   Phe Gly Ala Ala Glu   Thr Val Leu Glu Gly
                1180               1185                   1190


agc gac gga aca cgg   ttc gcg ttc gga cac   cac ggg ggc tcg gaa        3843
Ser Asp Gly Thr Arg   Phe Ala Phe Gly His   His Gly Gly Ser Glu
                1195               1200                   1205
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cgg ccg gca gaa acc  cag gcg ggg cga cag  cgg cgc acc gca gac         3888
Arg Pro Ala Glu Thr  Gln Ala Gly Arg Gln  Arg Arg Thr Ala Asp
                1210                 1215                 1220


gac aga gaa cac gct  ttg gag ccg gac gat  tgg gag gtg ggg tgt         3933
Asp Arg Glu His Ala  Leu Glu Pro Asp Asp  Trp Glu Val Gly Cys
                1225                 1230                 1235


gaa gac gcg tgg gac  agc gag gag ggg ggc  ggg gac gac ggg gac         3978
Glu Asp Ala Trp Asp  Ser Glu Glu Gly Gly  Gly Asp Asp Gly Asp
                1240                 1245                 1250


gca ccg ggg tca tcc  ttt ggg gtg agc gtc  gtg tcg gtg gcc ccg         4023
Ala Pro Gly Ser Ser  Phe Gly Val Ser Val  Val Ser Val Ala Pro
                1255                 1260                 1265


ggt gtg ctg cga gac  cgc cgg gtg ggc tyg  cgc ccg gcg gtc aag         4068
Gly Val Leu Arg Asp  Arg Arg Val Gly Xaa  Arg Pro Ala Val Lys
                1270                 1275                 1280


gtg gag ctg ttg tcc  tcg tcc tcg tcc tcc  gag gac g
```